In the Claims

Please amend the claims as follows. Applicants presents a full set of claims showing markups of the claims with insertions and deletions indicated by underlining and strikethrough text, respectively.

3

1-18. (Cancelled)

- 19. (New) A synthetic antimicrobial peptide comprising one of the amino acid sequences listed in the Sequence Listing, or its functional analog derived from substitution, cyclization, replacement of L-amino acid by D-amino acid, deletion or addition of one or more amino acids.
- 20. (New) The synthetic antimicrobial peptide of claim 19, wherein the peptide comprises the following core structure:

- 21. (New) The synthetic antimicrobial peptide of claim 20, wherein A1, A1' and A1" are each selected from the group consisting of Lys and Arg.
- 22. (New) The synthetic antimicrobial peptide of claim 20, wherein A2, A2' and A2" are each selected from the group consisting of Gly, Ala, Val, Leu, Ile and Phe.
- 23. (New) The synthetic antimicrobial peptide of claim 20, wherein A3, A3' and A3" are each selected from the group consisting of Gly, Ala, Val, Leu, Ile and Phe.
- 24. (New) The synthetic antimicrobial peptide of claim 20, wherein A4, A4' and A4" are each selected from the group consisting of Lys and Arg.
- 25. (New) The synthetic antimicrobial peptide of claim 20, wherein the N-terminal end of the core structure (A1-A2-A3-A4) is linked with a sequence having 11 amino acids.
- 26. (New) The synthetic antimicrobial peptide of claim 25, wherein each of the amino acids 1, 3, 6 and 7 of the sequence is selected from the group consisting of Lys and Arg.
- 27. (New) The synthetic antimicrobial peptide of claim 25, wherein the amino acid 2 of the sequence is selected from the group consisting of Trp and Phe.
- 28. (New) The synthetic antimicrobial peptide of claim 25, wherein each of the amino acids 4, 5, 8, 9, 10 and 11 of the sequence is selected from the group consisting of Leu, Ile, Ala, Val and Gly.
- 29. (New) A method for producing the synthetic antimicrobial peptide of claim 19 by solid-phase chemical synthesis.

Int'l Application No.: PCT/CN03/00522 4 Int'l Filing Date: 01 July 2003

30. (New) A method for producing the synthetic antimicrobial peptide of claim 19, comprising the steps of cloning the genes encoding the peptides into a vector, transforming the vector into a host cell, and expressing the peptides.

- 31. (New) The method of claim 30, wherein the vector is selected from the group consisting of plasmid and virus.
- 32. (New) The method of claim 30, wherein the host cell is a prokaryotic cell.
- 33. (New) The method of claim 32, wherein the prokaryotic cell is selected from the group consisting of Escherichia coli and Bacillus subtilis.
- 34. (New) The method of claim 30, wherein the host cell is a eukaryotic cell.
- 35. (New) The method of claim 34, wherein the eukaryotic cell is selected from the group consisting of yeast, plant, insect and mammal cells.
- 36. (New) Use of the synthetic antimicrobial peptide of claim 19 in the preparation of a drug for treating the infectious diseases induced by bacteria, fungi and/or viruses.
- 37. (New) Use of the synthetic antimicrobial peptide of claim 19 in the preparation of an antitumor drug.